Section 1

My Kichen Tap versus my Refrigerator ‘Filter’

‘FILTERED’ WATER?

1. **This investigation was conducted in 2007 and posted to the *H_2O’C Engineering* website in 2008: http://www.h2oc.com/h2oc-library/libraryindex.html**
2. **The slide show was posted to the American Chemical Society website, January, 2011 under *Water and Wastewater Slide Shows*: https://communities.acs.org/blogs/h2oc?start=15**

Since refrigerators often come with houses and last for decades, it can be a major household event when a truly brand new unit arrives. When this finally occurred, the opportunity to compare the water issuing from our new filtered water dispenser with our local tap water was irresistible.

What kind of *‘filter’* adds particles (e.g., microorganisms) to water?

Although the microorganisms appeared more rapidly than expected, the presence of bacteria in the water dispensed by my new refrigerator was predictable. It is well-known that carbon, a reducing agent, readily consumes chlorine. It is this absence of chlorine that consumers cite as their perception that the water quality (taste) has improved. In the absence of a disinfectant residual, however, bacterial growth will occur.

The only question was, *“How quickly?”*